



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/018,248  
Source: PCT/0  
Date Processed by STIC: 5/22/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebs/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:  
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
Or  
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



PCT10

## RAW SEQUENCE LISTING

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:57

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

3 <110> APPLICANT: EXELIXIS, INC.  
 5 <120> TITLE OF INVENTION: ANIMAL MODELS AND METHODS FOR ANALYSIS OF LIPID  
 6 METABOLISM AND SCREENING OF PHARMACEUTICAL AND  
 7 PESTICIDAL AGENTS THAT MODULATE LIPID METABOLISM  
 9 <130> FILE REFERENCE: SREBP-INT  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/018,248  
 12 <141> CURRENT FILING DATE: 2000-06-08  
 14 <150> PRIOR APPLICATION NUMBER: 09/332,522  
 15 <151> PRIOR FILING DATE: 1999-06-14  
 17 <150> PRIOR APPLICATION NUMBER: 60/189,700  
 18 <151> PRIOR FILING DATE: 2000-03-15  
 20 <160> NUMBER OF SEQ ID NOS: 8  
 22 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

89 <210> SEQ ID NO: 2  
 90 <211> LENGTH: 1113  
 91 <212> TYPE: PRT  
 92 <213> ORGANISM: Caenorhabditis elegans  
 94 <400> SEQUENCE: 2  
 95 Met Asn Glu Glu Phe Glu Gly Asp Val Pro Met Ser Asp Pro Phe Leu  
 96 1 5 10 15  
 98 Ser Leu Val Thr Lys Leu Asp Asp Ile Ala Pro Phe Pro Asn Asn Asp  
 99 20 25 30  
 101 Pro Leu Asp Phe Asp Met Glu His Asn Trp Gln Glu Pro Gly Pro Ser  
 102 35 40 45  
 104 Gln Gln Pro Asp Pro Ser Ile Pro Gly Asn Gln His Ser Pro Pro Gln  
 105 50 55 60  
 107 Glu Tyr Tyr Asp Ile Asp Gly Gln Arg Asp Val Ser Thr Leu His Ser  
 108 65 70 75 80  
 110 Leu Leu Asn His Asn Asn Asp Asp Phe Phe Ser Met Arg Phe Ser Pro  
 111 85 90 95  
 113 Pro Asn Phe Asp Leu Gly Gly Gly Arg Gly Pro Ser Leu Ala Ala Thr  
 114 100 105 110  
 116 Gln Gln Leu Ser Gly Glu Gly Pro Ala Ser Met Leu Asn Pro Leu Gln  
 117 115 120 125  
 119 Thr Ser Pro Pro Ser Gly Gly Tyr Pro Pro Ala Asp Ala Tyr Arg Pro  
 120 130 135 140  
 122 Leu Ser Leu Ala Gln Gln Leu Ala Ala Pro Ala Met Thr Pro His Gln  
 123 145 150 155 160  
 125 Ala Ala Ser Leu Phe Val Asn Thr Asn Gly Ile Asp Gln Lys Asn Phe

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/018,248

DATE: 05/22/2002

TIME: 15:48:57

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

126					165					170					175	
128	Thr	His	Ala	Met	Leu	Ser	Ser	Pro	His	His	Thr	Ser	Met	Thr	Ser	Gln
129					180					185				190		
131	Pro	Tyr	Thr	Glu	Ala	Met	Gly	His	Ile	Asn	Gly	Tyr	Met	Ser	Pro	Tyr
132				195				200					205			
134	Asp	Gln	Ala	Gln	Gly	Pro	Ser	Gly	Pro	Ser	Tyr	Tyr	Ser	Gln	His	His
135		210					215					220				
137	Gln	Ser	Pro	Pro	Pro	His	His	His	His	His	His	Pro	Met	Pro	Lys	Ile
138	225					230					235				240	
140	His	Glu	Asn	Pro	Glu	Gln	Val	Ala	Ser	Pro	Ser	Ile	Glu	Asp	Ala	Pro
141					245					250					255	
143	Glu	Thr	Lys	Pro	Thr	His	Leu	Val	Glu	Pro	Gln	Ser	Pro	Lys	Ser	Pro
144				260					265				270			
146	Gln	Asn	Met	Lys	Glu	Glu	Leu	Leu	Arg	Leu	Leu	Val	Asn	Met	Ser	Pro
147		275						280					285			
149	Ser	Glu	Val	Glu	Arg	Leu	Lys	Asn	Lys	Lys	Ser	Gly	Ala	Cys	Ser	Ala
150		290					295					300				
152	Thr	Asn	Gly	Pro	Ser	Arg	Ser	Lys	Glu	Lys	Ala	Ala	Lys	Ile	Val	Ile
153	305					310					315				320	
155	Gln	Glu	Thr	Ala	Glu	Gly	Asp	Glu	Asp	Glu	Asp	Asp	Glu	Asp	Ser	Asp
156					325					330					335	
158	Ser	Gly	Glu	Thr	Met	Ser	Gln	Gly	Thr	Thr	Ile	Ile	Val	Arg	Arg	Pro
159				340					345				350			
161	Lys	Thr	Glu	Arg	Arg	Thr	Ala	His	Asn	Leu	Ile	Glu	Lys	Lys	Tyr	Arg
162			355					360					365			
164	Cys	Ser	Ile	Asn	Asp	Arg	Ile	Gln	Gln	Leu	Lys	Val	Leu	Leu	Cys	Gly
165		370					375					380				
167	Asp	Glu	Ala	Lys	Leu	Ser	Lys	Ser	Ala	Thr	Leu	Arg	Arg	Ala	Ile	Glu
168	385					390					395				400	
170	His	Ile	Glu	Glu	Val	Glu	His	Glu	Asn	Gln	Val	Leu	Lys	His	His	Val
171				405						410					415	
173	Glu	Gln	Met	Arg	Lys	Thr	Leu	Gln	Asn	Asn	Arg	Leu	Pro	Tyr	Pro	Glu
174				420					425				430			
176	Pro	Ile	Gln	Tyr	Thr	Glu	Tyr	Ser	Ala	Arg	Ser	Pro	Val	Glu	Ser	Ser
177			435					440					445			
179	Pro	Ser	Pro	Pro	Arg	Asn	Glu	Arg	Lys	Arg	Ser	Arg	Met	Ser	Thr	Thr
180		450					455					460				
182	Thr	Pro	Met	Lys	Asn	Gly	Thr	Arg	Asp	Gly	Ser	Ser	Lys	Val	Thr	Leu
183	465				470					475					480	
185	Phe	Ala	Met	Leu	Leu	Ala	Val	Leu	Ile	Phe	Asn	Pro	Ile	Gly	Leu	Leu
186				485						490				495		
188	Ala	Gly	Ser	Ala	Ile	Phe	Ser	Lys	Ala	Ala	Ala	Glu	Ala	Pro	Ile	Ala
189				500					505				510			
191	Ser	Pro	Phe	Glu	His	Gly	Arg	Val	Ile	Asp	Asp	Pro	Asp	Gly	Thr	Ser
192			515					520					525			
194	Thr	Arg	Thr	Leu	Phe	Trp	Glu	Gly	Ser	Ile	Ile	Asn	Met	Ser	Tyr	Val
195			530				535					540				
197	Trp	Val	Phe	Asn	Ile	Leu	Met	Ile	Ile	Tyr	Val	Val	Val	Lys	Leu	Leu
198	545					550					555				560	

## RAW SEQUENCE LISTING

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:57

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

```

200 Ile His Gly Asp Pro Val Gln Asp Phe Met Ser Val Ser Trp Gln Thr
201                               565                               570                               575
203 Phe Val Thr Thr Arg Glu Lys Ala Arg Ala Glu Leu Asn Ser Gly Asn
204                               580                               585                               590
206 Leu Lys Asp Ala Gln Arg Lys Phe Cys Glu Cys Leu Ala Thr Leu Asp
207                               595                               600                               605
209 Arg Ser Leu Pro Ser Pro Gly Val Asp Ser Val Phe Ser Val Gly Trp
210                               610                               615                               620
212 Glu Cys Val Arg His Leu Leu Asn Trp Leu Trp Ile Gly Arg Tyr Ile
213 625                               630                               635                               640
215 Ala Arg Arg Arg Arg Ser Thr Thr Lys Pro Val Ser Val Val Cys Arg
216                               645                               650                               655
218 Ser His Ala Gln Thr Ala Val Leu Tyr His Glu Ile His Gln Leu His
219                               660                               665                               670
221 Leu Met Gly Ile Thr Gly Asn Phe Glu Asp Thr Tyr Glu Pro Ser Ala
222                               675                               680                               685
224 Leu Thr Gly Leu Phe Met Ser Leu Cys Ala Val Asn Leu Ala Glu Ala
225                               690                               695                               700
227 Ala Gly Ala Ser Asn Asp Gly Leu Pro Arg Ala Val Met Ala Gln Ile
228 705                               710                               715                               720
230 Tyr Ile Ser Ala Ser Ile Gln Cys Arg Leu Ala Leu Pro Asn Leu Leu
231                               725                               730                               735
233 Ala Pro Phe Phe Ser Gly Tyr Phe Leu Arg Arg Ala Arg Arg His Val
234                               740                               745                               750
236 Arg Arg Ala Pro Glu His Ser Val Ser His Leu Leu Trp Ile Phe His
237                               755                               760                               765
239 Pro Ala Thr Arg Lys Phe Met Ser Asp Ala Lys Arg Leu Glu His Val
240                               770                               775                               780
242 Leu Ser Ser Lys Gln Lys Gln Leu Arg Phe Gly Ser Phe Val Glu Asp
243 785                               790                               795                               800
245 Glu Gln Leu Ser Pro Leu Ala Arg Ile Arg Thr Thr Leu Lys Val Tyr
246                               805                               810                               815
248 Leu Leu Ser Lys Leu Val Gln Glu Leu Val Gly Gly Asp Glu Ile Phe
249                               820                               825                               830
251 Thr Lys Asn Val Glu Arg Ile Leu Asn Asp Asn Asp Arg Leu Asp Asp
252                               835                               840                               845
254 Glu Val Asp Val Val Asp Val Ser Arg Leu Leu Val Thr Ile Ser Thr
255                               850                               855                               860
257 Gln Cys Ala Ala Ile Leu Thr Asn Glu Lys Asp Glu Ser Ala Lys Phe
258 865                               870                               875                               880
260 Gly Thr Trp Ile Ser Arg Asn Gly Asp Ala Cys Cys Thr Trp Trp Thr
261                               885                               890                               895
263 His Val Leu Thr Cys Gly Ile Tyr Trp Arg Ser Asn Lys Asn Glu Leu
264                               900                               905                               910
266 Ala Arg Gln His Tyr Ser Leu Ile Arg Asn Cys Pro Pro Lys Ile Leu
267                               915                               920                               925
269 Thr Asp Asn Leu Gly Leu Ala Val Gly His Ala Leu Cys Ala Arg Lys
270                               930                               935                               940
272 Ile Cys Ile Asp Asp Arg Asp Ser Pro Lys Val Ser Gln Tyr Val Cys

```

see page 9

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/018,248

DATE: 05/22/2002

TIME: 15:48:57

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

```

273 945          950          955          960
275 Ile His Thr Lys Lys Ser Leu Glu Ser Leu Arg Leu Phe Ser Thr Ser
276          965          970          975
278 Ser Arg Ala Ser Gly Val Val Ser Gly Ile Gln Glu Gly Thr Arg Arg
279          980          985          990
281 Met Ala Tyr Glu Trp Ile Met Asn Ser Leu Leu Asp Ala Trp Arg Ser
282          995          1000          1005
284 Asn Leu Phe Ala Ser Lys Pro Tyr Trp Thr Gln Ser Phe Lys Gly Gln
285          1010          1015          1020
287 Ser Thr Phe Ser Thr Leu Tyr Gln Glu Ala Tyr Asn His Tyr Ala Ile
288          1025          1030          1035          1040
290 Ile Asn Gly Thr Arg Gly Asp Cys Trp Arg Leu Phe Val Tyr Glu Leu
291          1045          1050          1055
293 Thr Cys Arg Met Leu Asn Gly Ala Asn Pro Gln Ala Thr Trp Ser Gly
294          1060          1065          1070
E--> 296 Xaa Arg Arg Val Arg Ser Thr Lys Met Asp Ala Val Arg Gly Arg Val
297          1075          1080          1085
299 Ser Met Arg Arg Ser Ala Gln Pro Asp Ala Phe His Leu His Thr Leu
300          1090          1095          1100
302 Val Lys Leu His Thr Ser Met Asp Leu
303 1105          1110
768 <210> SEQ ID NO: 7
769 <211> LENGTH: 3160
770 <212> TYPE: DNA
771 <213> ORGANISM: Drosophila melanogaster
773 <400> SEQUENCE: 7
774 gcacgagcac agacgaagcc tgttgaactt ttcgtaaaaa ttattccttt cgcaaagtta 60
775 aatgaatgtg tttactttct tatttataat aagcgcaatt tgcagcctcg acgcctttaa 120
776 aacagccggt gttccaaatg agttcatcgt tcaattccat tcaaaatact ttgccccggt 180
777 ccgagaatcc tacatcgagc caaaacttct tgggttcaaac gtaacgaact ggagaattgt 240
778 tccccgtcta aatttggtt ggcaatatcc aagtgtttt gatattctac gattttgcga 300
779 cgttatgaa tcatcatcag agtttattat agaaaggctt cagactcacc catcagtaaa 360
780 ggcagtagtt cccagcgaa gcgtacgaag gatcctaaac tatgacgcct atagcaacct 420
781 aacgtatatt caccgccatc cccaaggagt gctaaggaac agaaaccaa acaacgatcg 480
782 ccaccgacaa ttgtgtccg tactccacgc caacatcctt tggaagctgg gtatcacagg 540
783 caagggagtt aaagtggcca ttttcgacac tggcctaacc aaaaaccatc cacactttcg 600
784 aaatgtaaag gaacgaacaa actggacgaa tgaaaagtca cttgacgaca gattcagtca 660
785 tggcaccttc gtcgccggg taatcgcttc ttccagggaa tgcctaggct tcgtccccga 720
786 cgcgatctt tacatattta aagtttttac gaactcccaa gtttcttaca ctctctgggt 780
787 cctggatgca ttcaactacg cgatatatag gaaaataaac attctcaacc ttagcattgg 840
788 gggccccgac tttatggact cgccgttcgt tgaaaagggt ttggaactgt cggctaataa 900
789 tgtcataatg atatcggcag caggaaatga tggtccttg tacggcacgc taaacaatcc 960
790 tggcgatcag agcgatgtag ttggcggttg tggcattcag tttgatgata aaatcgccaa 1020
791 gtttagttcg agaggaatga caacgtggga acttccctta ggctacggac gtatgggact 1080
792 cgatattgtc acgtacggaa gtcaagtgga aggcagtgat gtgcgcaagg ggtgcagacg 1140
793 actctctgga acatccgtgt cctctccagt tgttcgagg gctgctgcac tgcttataag 1200
794 cgggtgcattt cagaaaatcg actacataaa ccagcatct cttagcagg tactcattga 1260
795 aggtgccgag aaactgccgc attataacat gtttgagcag ggagctggaa aactgaattt 1320
796 gctgaagagt atgcagctat tgctgtcata caaaccaaag ataaccctta ttccggcata 1380

```

## RAW SEQUENCE LISTING

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:58

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

```

797 ccttgacttc acccaaaact atatgtggcc ttatagctcc caacctctgt actatggaag 1440
798 ctccgtcgct attgcaaacg ttaccatact caatgggtatc tctgtcacaa gtcatatagt 1500
799 tggcaccctt aaatggattc ccgatttcga aaaccaagggt cagttttcttc aagtatctgc 1560
800 acaagtttcg cctatcgttt ggccgtggac cggttggatg tcagttttta ttgctgtaaa 1620
801 aaaggaagga gaaaactttg aaggtgtttg taaaggaagt atcaccctag ttttggaaaag 1680
802 ctttaaacag accaccaacg aaactcatgt tacagaagtc gactttcctt taacaataaa 1740
803 ggttactcca aaaccgcca gaaacaagag gattttatgg gatcagtacc acagcctaag 1800
804 gtatccaccg cgctatatc cacgagatga tctcaaagtt aaactagatc ctctggactg 1860
805 gagggcagac catatacaca caaactttag ggacatgtat acacatttac gaaatgttgg 1920
806 ctactacatt gatgttttgc gagaaccctt cacctgcttc aatgcctcgg attatggcgc 1980
807 gttattgatt gttgaccctg agagagggtt tggcgacgag gaaataaacg ctttacagga 2040
808 aaacgtgtat aaaagaggct tgaatgtcgt cgtattcgga gactgggata acaccactgt 2100
809 gatgaaaaaa attaaattct ttgacgagaa caccgcgaaa tgggtggacac ccgacactgg 2160
810 tggcgcaaat attccagcct tgaatgattt attgaagcca tttggaattg cttttggcga 2220
811 ttttgtcggg gagggacatt tcaaactggg cgaccattca atgtactatg ctagtggagc 2280
812 cacaattgtt aagtttccaa tgaatccagg agatattata gtgggcacaa aactgaatga 2340
813 ccaaggactt tcgattatta attctaaaac acccagcaag gtagcaaaac tagatgtacc 2400
814 tatttttggg atgttccaaa ccaaggcgaa cagtattcaa agcaacgagg aaatcgtggg 2460
815 caatgcggaa agcaatttgg cagaggctat acccagatg tactccacat ttaagaaccg 2520
816 ggttttgcta ctgcgaacga agcaacgaag tatcagtttt gcgaaaagca ataatcatga 2580
817 aactaagaat gaaggacgta ttgccgtata tggggactcc aactgcctcg actccacgca 2640
818 tctggagaag gcttgctact ggctgcta at aacgttttta gattttgcaa taaactcgca 2700
819 caaatcaagt ttattgcaga atctaaatcg tataactgaa tttcacaat tagagagagc 2760
820 accattaccc cttaggatat cgcaaagtat tataaaatct cgttcacagg acaataattg 2820
821 tgaacaattt aagtggcttg caccgacgaa gcaaaataac gccgaggaaa ggaaatcttc 2880
822 tataatagac gtaaccatac tggaaaatga agaacacgag ataaatttaa tcaaaaattt 2940
823 attgggtgag gagatcgcaa aactagggca aaacaatgat tatttaacag gaatgcaatc 3000
E--> 824 cgcgatagt ctaatgactc caatatattc taattatnat aagcctaant gtatcatgta 3060
825 tttgtttatt taaagcgctc attcatttgt aataatactt cactttaaaa cgtaaaaaaa 3120
826 aaaaaactga ggggccgtac cattcgctaa ggagcgatct 3160
829 <210> SEQ ID NO: 8
830 <211> LENGTH: 993
831 <212> TYPE: PRT
832 <213> ORGANISM: Drosophila melanogaster
834 <400> SEQUENCE: 8
835 Met Asn Val Phe Thr Phe Leu Phe Ile Ile Ser Ala Ile Cys Ser Leu
836 1 5 10 15
838 Asp Ala Phe Lys Thr Ala Val Val Pro Asn Glu Phe Ile Val His Phe
839 20 25 30
841 His Ser Lys Tyr Phe Ala Pro Val Arg Glu Ser Tyr Ile Ala Ala Lys
842 35 40 45
844 Leu Leu Gly Ser Asn Val Thr Asn Trp Arg Ile Val Pro Arg Leu Asn
845 50 55 60
847 Leu Ala Trp Gln Tyr Pro Ser Asp Phe Asp Ile Leu Arg Val Cys Asp
848 65 70 75 80
850 Gly Tyr Glu Ser Ser Ser Glu Phe Ile Ile Glu Arg Leu Gln Thr His
851 85 90 95
853 Pro Ser Val Lys Ala Val Val Pro Gln Arg Ser Val Arg Arg Ile Leu
854 100 105 110

```

see page 9

## RAW SEQUENCE LISTING

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:58

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

```

856 Asn Tyr Asp Ala Tyr Ser Asn Leu Thr Tyr Ile His Arg His Pro Gln
857      115      120      125
859 Gly Val Leu Arg Asn Arg Asn Pro Asn Asn Asp Arg His Arg Gln Leu
860      130      135      140
862 Cys Ser Val Leu His Ala Asn Ile Leu Trp Lys Leu Gly Ile Thr Gly
863 145      150      155      160
865 Lys Gly Val Lys Val Ala Ile Phe Asp Thr Gly Leu Thr Lys Asn His
866      165      170      175
868 Pro His Phe Arg Asn Val Lys Glu Arg Thr Asn Trp Thr Asn Glu Lys
869      180      185      190
871 Ser Leu Asp Asp Arg Val Ser His Gly Thr Phe Val Ala Gly Val Ile
872      195      200      205
874 Ala Ser Ser Arg Glu Cys Leu Gly Phe Ala Pro Asp Ala Asp Leu Tyr
875      210      215      220
877 Ile Phe Lys Val Phe Thr Asn Ser Gln Val Ser Tyr Thr Ser Trp Phe
878 225      230      235      240
880 Leu Asp Ala Phe Asn Tyr Ala Ile Tyr Arg Lys Ile Asn Ile Leu Asn
881      245      250      255
883 Leu Ser Ile Gly Gly Pro Asp Phe Met Asp Ser Pro Phe Val Glu Lys
884      260      265      270
886 Val Leu Glu Leu Ser Ala Asn Asn Val Ile Met Ile Ser Ala Ala Gly
887      275      280      285
889 Asn Asp Gly Pro Leu Tyr Gly Thr Leu Asn Asn Pro Gly Asp Gln Ser
890      290      295      300
892 Asp Val Val Gly Val Gly Gly Ile Gln Phe Asp Asp Lys Ile Ala Lys
893 305      310      315      320
895 Phe Ser Ser Arg Gly Met Thr Thr Trp Glu Leu Pro Leu Gly Tyr Gly
896      325      330      335
898 Arg Met Gly Leu Asp Ile Val Thr Tyr Gly Ser Gln Val Glu Gly Ser
899      340      345      350
901 Asp Val Arg Lys Gly Cys Arg Arg Leu Ser Gly Thr Ser Val Ser Ser
902      355      360      365
904 Pro Val Val Ala Gly Ala Ala Leu Leu Ile Ser Gly Ala Phe Gln
905      370      375      380
907 Lys Ile Asp Tyr Ile Asn Pro Ala Ser Leu Lys Gln Val Leu Ile Glu
908 385      390      395      400
910 Gly Ala Glu Lys Leu Pro His Tyr Asn Met Phe Glu Gln Gly Ala Gly
911      405      410      415
913 Lys Leu Asn Leu Leu Lys Ser Met Gln Leu Leu Leu Ser Tyr Lys Pro
914      420      425      430
916 Lys Ile Thr Leu Ile Pro Ala Tyr Leu Asp Phe Thr Gln Asn Tyr Met
917      435      440      445
919 Trp Pro Tyr Ser Ser Gln Pro Leu Tyr Tyr Gly Ser Ser Val Ala Ile
920      450      455      460
922 Ala Asn Val Thr Ile Leu Asn Gly Ile Ser Val Thr Ser His Ile Val
923 465      470      475      480
925 Gly Ile Pro Lys Trp Ile Pro Asp Phe Glu Asn Gln Gly Gln Phe Leu
926      485      490      495
928 Gln Val Ser Ala Gln Val Ser Pro Ile Val Trp Pro Trp Thr Gly Trp

```

## RAW SEQUENCE LISTING

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:58

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

```

929          500          505          510
931 Met Ser Val Phe Ile Ala Val Lys Lys Glu Gly Glu Asn Phe Glu Gly
932          515          520          525
934 Val Cys Lys Gly Ser Ile Thr Leu Val Leu Glu Ser Phe Lys Gln Thr
935          530          535          540
937 Thr Asn Glu Thr His Val Thr Glu Val Asp Phe Pro Leu Thr Ile Lys
938 545          550          555          560
940 Val Thr Pro Lys Pro Pro Arg Asn Lys Arg Ile Leu Trp Asp Gln Tyr
941          565          570          575
943 His Ser Leu Arg Tyr Pro Pro Arg Tyr Ile Pro Arg Asp Asp Leu Lys
944          580          585          590
946 Val Lys Leu Asp Pro Leu Asp Trp Arg Ala Asp His Ile His Thr Asn
947          595          600          605
949 Phe Arg Asp Met Tyr Thr His Leu Arg Asn Val Gly Tyr Tyr Ile Asp
950          610          615          620
952 Val Leu Arg Glu Pro Phe Thr Cys Phe Asn Ala Ser Asp Tyr Gly Ala
953 625          630          635          640
955 Leu Leu Ile Val Asp Pro Glu Arg Gly Phe Gly Asp Glu Glu Ile Asn
956          645          650          655
958 Ala Leu Gln Glu Asn Val Tyr Lys Arg Gly Leu Asn Val Val Val Phe
959          660          665          670
961 Gly Asp Trp Tyr Asn Thr Thr Val Met Lys Lys Ile Lys Phe Phe Asp
962          675          680          685
964 Glu Asn Thr Arg Gln Trp Trp Thr Pro Asp Thr Gly Gly Ala Asn Ile
965          690          695          700
967 Pro Ala Leu Asn Asp Leu Leu Lys Pro Phe Gly Ile Ala Phe Gly Asp
968 705          710          715          720
970 Phe Val Gly Glu Gly His Phe Lys Leu Gly Asp His Ser Met Tyr Tyr
971          725          730          735
973 Ala Ser Gly Ala Thr Ile Val Lys Phe Pro Met Asn Pro Gly Asp Ile
974          740          745          750
976 Ile Val Gly Thr Lys Leu Asn Asp Gln Gly Leu Ser Ile Ile Asn Ser
977          755          760          765
979 Lys Thr Pro Ser Lys Val Ala Lys Leu Asp Val Pro Ile Phe Gly Met
980          770          775          780
982 Phe Gln Thr Lys Ala Asn Ser Ile Gln Ser Asn Glu Glu Ile Val Val
983 785          790          795          800
985 Asn Ala Glu Ser Asn Leu Ala Glu Ala Ile Pro Thr Asp Tyr Ser Thr
986          805          810          815
988 Phe Lys Asn Arg Val Leu Leu Leu Arg Thr Lys Gln Arg Ser Ile Ser
989          820          825          830
991 Phe Ala Lys Ser Asn Asn His Glu Thr Lys Asn Glu Gly Arg Ile Ala
992          835          840          845
994 Val Tyr Gly Asp Ser Asn Cys Leu Asp Ser Thr His Leu Glu Lys Ala
995          850          855          860
997 Cys Tyr Trp Leu Leu Ile Thr Phe Leu Asp Phe Ala Ile Asn Ser His
998 865          870          875          880
1000 Lys Ser Ser Leu Leu Gln Asn Leu Asn Arg Ile Thr Glu Phe His Lys
1001          885          890          895

```



## RAW SEQUENCE LISTING

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:58

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

1003 Leu Glu Arg Ala Pro Leu Pro Leu Arg Ile Ser Gln Ser Ile Ile Lys  
1004 900 905 910  
1006 Ser Arg Ser Gln Asp Asn Asn Cys Glu Gln Phe Lys Trp Leu Ala Pro  
1007 915 920 925  
1009 Thr Lys Gln Asn Asn Ala Glu Glu Arg Lys Ser Ser Ile Ile Asp Val  
1010 930 935 940  
1012 Thr Ile Leu Glu Asn Glu Glu His Glu Ile Asn Leu Ile Lys Asn Leu  
1013 945 950 955 960  
1015 Leu Gly Glu Glu Ile Ala Lys Leu Gly Gln Asn Asn Asp Tyr Leu Thr  
1016 965 970 975  
1018 Gly Met Gln Ser Ala Asp Ser Leu Met Thr Pro Ile Tyr Ser Asn Tyr  
1019 980 985 990  
E--> 1021 Xaa

See page 9

## VARIABLE LOCATION SUMMARY

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:59

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

Use of n's or Xaa's(NEW RULES):

Use of n's and/or Xaa's have been detected in the Sequence Listing.

Use of &lt;220&gt; to &lt;223&gt; is MANDATORY if n's or Xaa's are present.

in &lt;220&gt; to &lt;223&gt; section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:2; Xaa Pos. 1073

Seq#:7; N Pos. 3038,3049

Seq#:8; Xaa Pos. 993

## VERIFICATION SUMMARY

DATE: 05/22/2002

PATENT APPLICATION: US/10/018,248

TIME: 15:48:59

Input Set : A:\PCT.US00.15880.APP

Output Set: N:\CRF3\05222002\J018248.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:296 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:2  
L:824 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:7  
L:1021 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:8